UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,882	01/30/2004	Sandro Grech	59643.00316	4108

32294 7590 06/28/2007	EXAMINER
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182	SHEDRICK, CHARLES TERRELL

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
	10/766,882	GRECH ET AL.
Office Action Summary	Examiner	Art Unit
	Charles Shedrick	2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 April 2007</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-16</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 4/2/07 have been fully considered but they are not persuasive.

On page 16 of Applicant remarks dated 4/2/07 the Applicant argues that Parikh reveals that there

is no teaching or disclosure of "simultaneously performing a packet data session establishment

procedure with the second communication network while still being attached to the first

communication network" (emphasis added), as recited in claim 1.

However, the Examiner respectfully disagree.

As noted in the previous remarks the Applicant appears to argue the **details** of **performing a**

packet data session establishment procedure . In other words performing a packet data

establishment procedure appears to be a very broad sense of describing a number of integral

steps to a procedure. However, **performing a packet data establishment procedure** given the

broadest reasonable interpretation would read on the prior art based on the plain meaning to a

person of ordinary skilled in the art. One interpretation of many has been given in the previous

remarks, but it appears that the Applicant has decided to forgo explaining the distinction based

on the Examiners interpretation.

Applicant admits that Parikh discloses only that the pre-**authentication process** can be carried

out while still being connected to the first communication network, which is described with

respect to steps 2 to 4 in Figure 4 of Parikh. The actual L2 authentication, which is different from

pre-authentication, is carried out in step 5 (see Figure 4) of Parikh. The IP bearer establishment is

then carried out in steps 6 and 7 of Parikh. However, nowhere in Parikh is there a teaching or

suggestion of <u>simultaneously</u> performing a packet data session establishment procedure with the second communication network while still being attached to the first communication network.

1.   In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **defining the packet data establishment procedure**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, pre-Authentication would still read on "performing an Authentication **procedure**" since **pre -authentication** is clearly **part** of the Authentication "Procedure" as a **whole**.

The Applicant notes that the clear distinction between the claimed invention over the prior art is that " Parikh only the pre-authentication process is carried out while still being attached to the first communication network, while in the recitations of claim 1, the pre-authentication and the PDP context establishment are carried out while still being attached to the first communication network." However, the Applicant has failed to incorporate the above distinction into claim 1. In an effort to further prosecution it is important that the Applicant understands that although the claims are interpreted in light of the specification, **limitations from the specification are not read into the claims.**

On page 17 Applicant further argues the that the distinction over the prior art is based in "the idea of carrying out both authentication and PDP context establishment while still connected to the first communication network and then performing handoff" and " this step "is not taught or disclosed by Parikh". However, the limitations are written in a manner that coves a broad aspect

of the procedures as a whole and are not clear with regard to what takes place within the "packet

data protocol establishment procedure".

Claims 14-16 are rejected based on previous remarks as well as those incorporated with claim 1.

Regarding claim 10, Applicant argues that "maintaining an attachment of the user equipment to

the second cellular communication network after the user equipment moves away from a

coverage area of the second cellular communication network for a predetermined time in order to

allow the user equipment to return to the second cellular communication network without having

to repeat an authentication procedure and a packet data session establishment procedure before

handing over to the second network," which is not taught or disclosed by Parikh. However, the

above issue is addressed by the prior art in order to reduce spurious handoffs and the "ping –

pong" affect which is also well-known in the art.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this
> or a foreign country, before the invention thereof by the applicant for a patent.

2.   Claims **1-15** are rejected under 35 U.S.C. 102(a) as being anticipated by **Parikh et al.**

(see PTO-892 Non-patent Literature section U)

Consider **claim 1**, Parikh et al. teaches the method for ensuring continuity of a

communication session when a user equipment hands over from a first communication network

(i.e., WLAN) to a second communication network (i.e., CDMA2000) comprising: performing an

authentication procedure for a packet data session with the second communication network while

the user equipment is still connected to the first communication network (**abstract,**

introduction, section 4.1 and figure 4); and simultaneously performing a packet data protocol

session establishment procedure with the second communication network while the user

equipment still connected to the first communication network (**abstract , introduction, section**

4.1 and figure 4).

Consider **claim 2** and **as applied to claim 1 above**, Parikh et al. teach a method as

claimed in claim 1, wherein the performing of the authentication procedure comprises

authenticating the second communication network (i.e., the CDMA2000) by the user equipment

(i.e., authentication challenge)(**section 4.1 and figure 4**).

Consider **claim 3** and **as applied to claim 2 above**, Parikh et al. teach a method as

claimed in claim 2, wherein the step of performing the authentication procedure comprises

authenticating the user equipment by the second communication network (i.e., the authentication

challenge) (**section 4.1 and figure 4**).

Consider **claim 4** and **as applied to claim 1 above**, Parikh et al. teach a method as

claimed in claim 1, further comprising: providing the first communication network comprising a

Wireless Local Area Network (WLAN) and the second communication network comprising a

cellular network (i.e., CDMA2000)(**section 1**).

Consider **claim 5** and **as applied to claim 1 above**, Parikh et al. teach a method as

claimed in claim 1, wherein the performing of the authentication procedure comprises sending

information by a user equipment for authentication and packet data session establishment,

wherein the information travels either as a separate IP package or is piggybacked with existing

signaling (**section 4.1 and figure 4**).

Consider **claim 6** and **as applied to claim 1 above**, Parikh et al. teach a method as

claimed in claim 1, further comprising: configuring a gateway node (i.e., AR)(**figure 4.1**)

between the first communication network and the second communication network to act as an

access router for the first communication network and to host the packet data session in the

second communication network (**section 4.1 and figure 4**).

Consider **claim 7** and **as applied to claim 1 above**, Parikh et al. teach a method as

claimed in claim 1, further comprising: releasing a packet data session if a user equipment does

not handover to the second communication network within a predetermined time thus requiring

the user equipment to repeat the authentication procedure if the user equipment is moving

towards the second communication network for a specified time (i.e., a gap in coverage) (**section

4.2.1**).

Consider **claim 8** and **as applied to claim 1 above**, Parikh et al. teach a method as

claimed in claim 1, further comprising: (i) sending by a user equipment a handover trigger

indication to a gateway node in the second communication network, wherein the handover

trigger indication comprises user equipment identification parameters and a packet data protocol

profile (**section 4.1 and figure 4**); (ii) sending by a gateway node the user equipment

identification parameters and the packet data protocol profile to a serving node in the second

cellular communication network (**section 4.1 and figure 4**); (iii) contacting by the serving node

a home location register to obtain user equipment authentication parameters (**section 4.1 and

figure 4**); (iv) sending by the serving node a packet data protocol profile request to the gateway

node (**section 4.1 and figure 4**); (v) responding by sending by the gateway node a packet data

protocol profile response to the serving node(**section 4.1 and figure 4**); (vi) sending by the

serving node authentication information to the gateway node(**section 4.1 and figure 4**); (vii)

sending the gateway node the authentication information to the user equipment(**section 4.1 and**

figure 4); (viii) authenticating by the user equipment the second communication network(**section**

4.1 and figure 4); (ix) sending by the user equipment a response to the serving node and moving

the user equipment into the second cellular communication network(**section 4.1 and figure 4**);

Consider **claim 9** and **as applied to claim 1 above**, Parikh et al. clearly show and

disclose a method as claimed in claim 1, further comprising: (i) sending by a user equipment a

handover trigger indication to a gateway node in the second communication network(**section 4.1**

and figure 4); (ii) sending by the gateway node a protocol data unit notification request to a

serving node in the second communication network(**section 4.1 and figure 4**); (iii) contacting by

the serving node a home location register (i.e., HA) to obtain user equipment authentication

parameters(**section 4.1 and figure 4**); (iv) sending by the serving node a proxy authentication

and a ciphering request to the gateway node(**section 4.1 and figure 4**); (v) converting by the

gateway node authentication information in the ciphering request which is then sent to the user

equipment(**section 4.1 and figure 4**); (vi) responding by the user equipment with an

authentication message which is sent to the gateway node(**section 4.1 and figure 4**); (vii)

converting by the gateway node the authentication message from the user equipment and sending

a proxy authentication and a ciphering response to the serving node(**section 4.1 and figure 4**);

(viii) sending by the serving node a protocol data unit notification response to the gateway

node(**section 4.1 and figure 4,conclusion**); (ix) sending by the serving node a create packet data

protocol request to the gateway node(**section 4.1 and figure 4, conclusion**) (i.e., see "network

initiated bearer setup"); (x) sending by the gateway node a create packet data protocol response

to the serving node(**section 4.1 and figure 4,conclusion**) (i.e., see "network initiated bearer

setup"); and (xi) replying by the gateway node to the handover trigger indication sent by the user

equipment by sending a handover trigger response to the user equipment(**section 4.1 and figure

4**).

Consider **claim 10**, Parikh et al. clearly show and disclose a method for ensuring

continuity of a communication session, the method comprising: handing over by a user

equipment from a first communication network (i.e., WLAN) (**figures 1 and 2**) to a second

cellular communication network (IMT-2000 Radio Network) (**figures 1 and 2**), and when the

user equipment hands over from the first communication network to the second communication

network (**section 4.1 and figure 4**), maintaining an attachment of the user equipment to the first

communication network after the user equipment moves away from a coverage area of the first

communication network for a predetermined time in order to allow the user equipment to return

to the first communication network without having to repeat an authentication procedure and a

packet data session establishment procedure before handing over to the second network (i.e., this

prevents the spurious handoff triggers) ((**sections 3.3- 4.2.1**).

Consider **claim 11** and **as applied to claim 10 above**, Parikh et al. teach a method as

claimed in claim 10, further comprising: releasing a packet data session if the user equipment

does not handover to the second cellular communication network within the predetermined time

thus requiring the user equipment to repeat the authentication procedure if the user equipment is

moving towards the second communication network for a specified time (i.e., a gap in coverage

and other areas for potential spurious handoff triggers) (**section 4.2.1**).

Consider **claim 12** and **as applied to claim 10 above**, Parikh et al. teach a method as

claimed in claim 1, further comprising: (i) sending by a user equipment a handover trigger

indication to a gateway node in the second communication network, wherein the handover

trigger indication comprises user equipment identification parameters and a packet data protocol

profile (**section 4.1 and figure 4**); (ii) sending by a gateway node the user equipment

identification parameters and the packet data protocol profile to a serving node in the second

cellular communication network (**section 4.1 and figure 4**); (iii) contacting by the serving node

a home location register to obtain user equipment authentication parameters (**section 4.1 and**

figure 4); (iv) sending by the serving node a packet data protocol profile request to the gateway

node (**section 4.1 and figure 4**); (v) responding by sending by the gateway node a packet data

protocol profile response to the serving node(**section 4.1 and figure 4**); (vi) sending by the

serving node authentication information to the gateway node(**section 4.1 and figure 4**); (vii)

sending the gateway node the authentication information to the user equipment(**section 4.1 and**

figure 4); (viii) authenticating by the user equipment the second cellular communication

network(**section 4.1 and figure 4**); and (ix) sending by the user equipment a response to the

serving node and moving the user equipment into the second communication network(**section**

4.1 and figure 4);

Consider **claim 13** and **as applied to claim 10 above**, Parikh et al. teach a method as

claimed in claim 1, further comprising: (i) sending by a user equipment a handover trigger

indication to a gateway node in the second communication network(**section 4.1 and figure 4**);

(ii) sending by the gateway node a protocol data unit notification request to a serving node in the

second cellular communication network(**section 4.1 and figure 4**); (iii) contacting by the serving

node a home location register to obtain user equipment authentication parameters(**section 4.1**

and figure 4); (iv) sending by the serving node a proxy authentication and a ciphering request to the gateway node(**section 4.1 and figure 4**); (v) converting by the gateway node authentication information in the ciphering request which is then sent to the user equipment(**section 4.1 and figure 4**); (vi) responding by the user equipment with an authentication message which is sent to the gateway node(**section 4.1 and figure 4**); (vii) converting by the gateway node the authentication message from the user equipment and sending a proxy authentication and a ciphering response to the serving node(**section 4.1 and figure 4**); (viii) sending by the serving node a protocol data unit notification response to the gateway node(**section 4.1 and figure 4,conclusion**); (ix) sending by the serving node a create packet data protocol request to the gateway node(**section 4.1 and figure 4**) (i.e., see "network initiated bearer setup"); (x) sending by the gateway node a create packet data protocol response to the serving node(**section 4.1 and figure 4, conclusion**) (i.e., see "network initiated bearer setup"); and (xi) replying by the gateway node to the handover trigger indication sent by the user equipment by sending a handover trigger response to the user equipment(**section 4.1 and figure 4**).

Consider **claim 14**, Parikh et al. clearly show and disclose a communication system (**abstract and introduction**) comprising: a user equipment; a first communication network and a second cellular communication network, the system being configured to enable continuity of a communication session when a user equipment moves from a coverage area of the first communication network to a coverage area of a second cellular communication network (**abstract, introduction, section 4.1 and figure 4**), and to simultaneously perform an authentication procedure for a packet data session with the second cellular communication network and a packet data protocol session establishment procedure with the second cellular

communication network, while the user equipment is still attached to the first communication

network(**abstract , introduction, section 4.1 and figure 4**.

Consider **claim 15**, Parikh et al. teach the communication system (**figures 1-4**) for

ensuring continuity of a communication session when a user equipment hands over from a first

communication network to a second cellular communication network (**abstract and**

introduction), the communication system comprising: first performing means for performing an

authentication procedure for a packet data session with a second communication network while

still being attached to a first communication network (**abstract , introduction, section 4.1 and**

figure 4); and second performing means for simultaneously perform a packet data protocol

session establishment procedure with the second cellular communication network while still

being attached to the first communication network(**abstract , introduction, section 4.1 and**

figure 4).

Consider **claim 16**, Parikh et al. teach the communication system (**figures 1-4**),

comprising an authentication unit configured to conduct an authentication procedure for a packet

data session between a first and second communication networks when a user equipment hands

off from the first communication network to the second communication network (**abstract ,**

introduction, section 4.1 and figure 4), the authentication procedure being conducted while the

user equipment is still attached to a first communication network(**abstract , introduction,**

section 4.1 and figure 4); and an establishment unit configured to simultaneously performing a

packet data session establishment procedure with the second communication network while still

being attached to the first communication network(**abstract , introduction, section 4.1 and**

figure 4).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Shedrick whose telephone number is (571)-272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid Lester can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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June 22, 2007

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